7. QUALITY ASSURANCE/QUALITY CONTROL

A revision to the existing Quality Assurance Project Plan (QAPjP) has been developed for INEEL WAGs 1, 2, 3, 4, 5, 6, 7, 10, and the Inactive Sites Department (DOE/ID 2000a). This plan pertains to all environmental, geotechnical, geophysical, and radiological testing, analysis, and data review. This section details the field elements of the QAPjP to support field operations during the groundwater sampling and monitoring.

7.1 Project Quality Objectives

The QA objectives specify the measurements that must be met to produce acceptable data for a project. The technical and statistical qualities of these measurements must be properly documented. Precision, accuracy, and completeness are quantitative parameters that must be specified for physical/chemical measurements. Comparability and representativeness are qualitative parameters.

The QA objectives for this project will be met through a combination of field and laboratory checks. Field checks will consist of collecting field duplicates, equipment blanks, and field blanks. Laboratory checks consist of initial and continuing calibration samples, laboratory control samples, matrix spikes, and matrix spike duplicates. Laboratory QA is detailed in the QAPjP and is beyond the scope of this LTMP.

7.1.1 Field Precision

Field precision is a measure of the variability not due to laboratory or analytical methods. The three types of field variability or heterogeneity are spatially within a data population, between individual samples, and within an individual sample. Although the heterogeneity between and within samples can be evaluated using duplicate and/or sample splits, overall field precision will be calculated as the relative percent difference between two measurements, or relative standard deviation between three or more measurements. The relative percent difference or relative standard deviation will be calculated as indicated in the QAPjP, for duplicate samples, during the data validation process. Precision goals have been established for inorganic Contract Laboratory Program (CLP) methods by the EPA (EPA 1993) and for radiological analyses in the SMO TPR-80, "Radiological Data Validation."

7.1.2 Field Accuracy

Cross-contamination of samples during collection or shipping could yield incorrect analytical results. To assess the occurrence of any cross-contamination events, field blanks will be collected to evaluate any potential impacts. One goal of the sampling program is to eliminate any cross-contamination associated with sample collection or shipping. Duplicate samples to assess precision will be co-located and collected by field personnel at a minimum frequency of one duplicate for every 20 samples or one duplicate sample per day, whichever is less as shown in Table 4-5. These duplicates will be collected for water (blanks). Sample identifications are provided in the SAP tables in Appendix B.

Accuracy of field-instrumentation will be maintained by calibrating all instruments used to collect data and cross-checking with other independently collected data.

7.1.3 Representativeness

Representativeness is evaluated by assessing the accuracy and precision of the sampling program and expressing the degree to which samples represent actual site conditions. In essence, representativeness is a qualitative parameter that addresses whether the sampling program was properly

designed to meet the DQOs. The representativeness criterion is best satisfied by confirming that sampling locations are selected properly and a sufficient number of samples are collected to meet the requirements stated in the DQOs (see Section 3.1).

7.1.4 Comparability

Comparability is a qualitative measure of the confidence with which one data set can be compared to another. These data sets include data generated by different laboratories performing this work, data generated by laboratories in previous studies, data generated by the same laboratory over a period of several years, or data obtained using different sampling techniques or analytical protocols. For field aspects of this program, data comparability will be achieved using standard methods of sample collection and handling. Procedures identified to standardize the sample collection and handling include TPR-EM-GW-56, "Sampling Groundwater," and MCP-244, "Chain of Custody, Sample Handling, and Packaging for CERCLA Activities" (INEEL 1997b).

Data collection frequency and long-term trends will ensure comparability of monitoring data.

7.1.5 Completeness

Field completeness will be assessed by comparing the number of samples collected to the number of samples planned. Field sampling completeness is affected by such factors as equipment and instrument malfunctions, and insufficient sample recovery. Completeness can be assessed following data validation and reduction. The completeness goal for this project is 100% for critical activities and 90% for noncritical activities. Well installations (see DOE/ID 2000f) are considered critical activities, while the collection of individual samples are noncritical.

7.2 Field Data Reduction

The reduction of field data is important to ensure that there have been no errors in sample labeling and documentation. This includes cross-referencing the SAP table presented in Appendix B with sample labels, logbooks, and chain of custody forms. Prior to sample shipment to the laboratory, field personnel will ensure that all field information is properly documented.

7.3 Data Validation

All laboratory-generated data will be validated to Level B. Data validation will be performed in accordance with TPR-79, "Levels of Analytical Method Data Validation." The data validation procedure for radioanalytes is TPR-80, "Radioanalytical Data Validation." Field-generated data (e.g., matric potential, moisture measurements, and water levels) will be validated through the use of properly calibrated instrumentation, comparing and cross-checking data with independently gathered data, and recording data collection activities in a bound field logbook.

7.4 Quality Assurance Objectives for Measurement

The QA objectives are specifications that the monitoring and sampling measurements identified in the QAPjP must meet to produce acceptable data for the project. The technical and statistical quality of these measurements must be properly documented. Precision, accuracy, method detection limits, and completeness must be specified for hydraulic and chemical measurements. Specific QA objectives are included in DOE-ID 2000a.

8. DATA MANAGEMENT/DATA ANALYSIS AND UNUSUAL OCCURRENCES

Analytical data that results from groundwater sampling will be managed and maintained by the Integrated Environmental Data Management System (IEDMS). The Hydrogeologic Data Repository (HDR) will supply long-term management of the field data. This section discusses the approach to managing the data, analysis of data, and suggested responses to unusual occurrences.

8.1 Data Management

The following discussion presents the various processes associated with managing the data collected in as part of the Long-Term Monitoring Plan. Group 5 data management will follow guidelines specified in the following section.

8.1.1 Laboratory Analytical Data

Analytical data are managed and maintained in the IEDMS. The components that make up IEDMS provide an efficient and accurate means of sample and data tracking.

The IEDMS performs sample tracking throughout all phases of a sampling project, beginning with the assignment of unique sample identification numbers using the SAP Application Program. The SAP Application produces a SAP table, which contains a list of sample identification numbers, sample demographics (area, location, and depth), and the planned analyses. Once the SAP application database is finalized, it is used to automatically produce sample labels and tags (with or without barcode identification). In addition, sampling guidance forms can be produced for the field sampling team that provide information such as sampling location, requested analysis, container types, and preservative.

When the analytical data package, or sample delivery group (SDG), is received, it is logged into the IEDMS journaling system, an integrated subsystem of the sample tracking system, which tracks the SDG from data receipt to Environmental Restoration Information System (ERIS). Cursory Technical Reviews on the data packages are performed to assess the completeness and technical compliance with respect to the project's analysis-specific Task Order Statement of Work or Statement of Work. Any deficiencies, resubmittal actions, and special instructions to the validator are recorded on the Cursory Subcontractual Compliance Review (CSCR) form using the Laboratory Performance Indicator Management System. This form is sent to the validator with the data package (when required).

Errors in the data package are resolved among the SMO chemist(s), the originating lab, and the IEDMS staff. Data validity is assured by the validator through the assignment of data validation flags. The validator generates a Limitations and Validation (L&V) report, which gives detailed information on the assignment of data qualifier flags. A copy of the form 1's accompanies the L&V-report with the validator assigned data qualifier flags and any changes to the data result. The validated data results, along with the data qualifier flags, are entered into the IEDMS database. From this database, a summary table (Result Table) is generated. The Result Table summarizes the sample identification numbers, sample logistics, analytes, and results for each particular type of analysis (such as inorganic, radiological, organic) from the sampling effort. The field sample data from this database is also uploaded to ERIS.

8.1.2 Field Data

Field data includes all data that is non-chemical analytical data generated in support of OU 3-13 Group 5. This data will be managed according to the requirements specified in the "Data Management

Plan for the Idaho National Engineering and Environmental Laboratory Environmental Restoration Program" (INEL 1995), and the "Data Management Plan for Field and Non-Chemical Data for the Operable Unit 3-13, Post Record of Decision, Group 4 and Group 5 Monitoring Well Installation Projects" (DOE/ID-2000e). Final field data will reside in the HDR for long-term management. The HDR will maintain hard copies of the data reports along with electronic copies of the final field data.

8.2 Data Analysis

8.2.1 Laboratory Analytical Data

Analytical data will be validated and analyzed by the SMO following MCP-227, "Sampling and Analysis Process for CERCLA and D&D Activities."

The validated data will be used in flux calculations to determine if contaminant fluxes to the SRPA from the vadose zone are decreasing as predicted by the OU 3-13 model, as well as determining if the former injection well is acting as a residual source of groundwater contamination in the vicinity of INTEC.

8.2.2 Field Data

Field data will be analyzed using methods that are appropriate for the data types and specific field conditions. Some data sets may be filtered. Analysis will include recognized methods and techniques that are used with the specific data types and may include statistical processes. Field data will be compared to modeled values (as discussed above). This may require that the groundwater be remodeled or, at least, that the model be recalibrated using field-determined values.

8.2.3 Decision Process

The data obtained under this monitoring program will be evaluated and incorporated into an updated OU 3-13 aquifer numerical model to determine if the COC fluxes from within the INTEC facility fence line have been reduced sufficiently to meet the COC concentration limits in the SRPA in 2095.

A summary of the process to update the numerical simulation of the monitoring data follows:

- 1. Refine the existing conceptual model describing the physical and chemical processes that will be represented in the simulation model.
- 2. Refine the existing parameterization of the model that meets the conceptual model assumptions. The OU 3-13 RI/FS model parameterization will be the primary source for this initial parameterization.
- 3. Calibrate the model. The calibration will consist of two parts. The first part will be an evaluation of the model structure that will determine which attributes of the subsurface model have the largest effect on predicted peak concentrations in the aquifer. The second part will consist of adjusting parameter values to improve model agreement to the field data.
- 4. Summarize the sensitivity and uncertainty analysis and how the results will be used.
- 5. Summarize the predictive model results and COC concentration predictions at the performance measurement point in 2095.

8.3 Unusual Occurrences

Unusual occurrences are situations that are unforeseen, unanticipated, or unexpected. They may occur in chemical data sets or as field-related data and observations. An example of an unusual occurrence is detection of a COC where previously it was undetected.

The following is meant to provide a process for resolving an unusual occurrence rather than a method for dealing with each specific unusual occurrence. The following steps will be taken to resolve an unusual occurrence:

- Record the unusual occurrence and supporting observations in the field log book.
- Validate unusual occurrence (e.g., reanalyze the sample if any remaining) and report to program manager as soon as possible.
- Determine if the occurrence is a one-time event or is recurring.
- If the unusual occurrence is of a significant nature (significant is anything that can potentially increase contaminant flux to the aquifer with concentration levels above MCLs, e.g., large persistent increases in water levels), it will be reported to the appropriate program managers.
- If the unusual occurrence is not of a significant nature (e.g., malfunctioning instrument that is reporting increases in water levels), it will be resolved by the technical leader and is a nonissue.
- For significant unusual occurrences, take appropriate action, which may include increasing sampling (in network, not just individual well) and/or monitoring frequency, or reviewing the ROD for implementation of a remedial action (for example, curtailing steam condensate discharges to the subsurface).

9. PROJECT ORGANIZATION AND RESPONSIBILITIES

The organization structure for this project reflects the resources and expertise required to perform the work, while minimizing the risks to worker health and safety. As outlined in the FFA/CO, each of the three signatory agencies (DOE, EPA, Idaho Department of Health and Welfare [IDHW] Department of Environmental Quality [DEQ]) has assigned a WAG project manager (PM). The WAG project manager's responsibility is to oversee the effective implementation of actions stated in final action documents such as the INTEC OU 3-13 ROD. This section is divided into two subsections that outline the responsibilities of key Bechtel BWXT Idaho, LLC (BBWI) work-site personnel only. Job titles of the individuals who will be filling key roles at the work site, and lines of responsibility and communication are shown in Figure 9-1. Section 9.2 discusses those positions that will supply support for the activities in the field but are not required to be onsite.

9.1 Job-Site Personnel

9.1.1 Project Manager

The PM coordinates all document preparation, file, laboratory, and modeling activities associated with this project and is responsible for the overall scope, schedule, and budget of this project. The PM will ensure that all activities conducted during the project comply with the following:

- INTEC site director requirements as outlined in STD-101, "Integrated Work Control Process," and MCP-3003
- MCPs and program requirements directives (PRDs)
- All applicable Occupational Safety and Health Administration (OSHA), EPA, DOE, DOT, and State of Idaho requirements
- The QAPiP, the project HASP, the project WMP, and this LTMP.

The PM will oversee preparation, review, and implementation of the LTMP to ensure work is performed as planned. The PM is responsible for (1) developing resource loaded, time-phased control account plans based on the project's technical requirements, budgets, and schedules and (2) assigning project tasks. Other functions and responsibilities of the PM related to completion of field activities include the following:

- Developing the site-specific plans required by the Environmental Restoration (ER) Program such as work plans, environmental HASPs, SAPs, etc.
- Ensuring that project activities and deliverables meet schedule and scope requirements as described in the FFA/CO Attachment A "Action Plan for Implementation of the Federal Facility Agreement and Consent Order" (DOE-ID 1991) and applicable guidance
- Coordinating and interfacing with units within the program support organization on issues relating to quality assurance (QA), environmental safety and health (ES&H), and National Environmental Policy Act (NEPA) support for the project

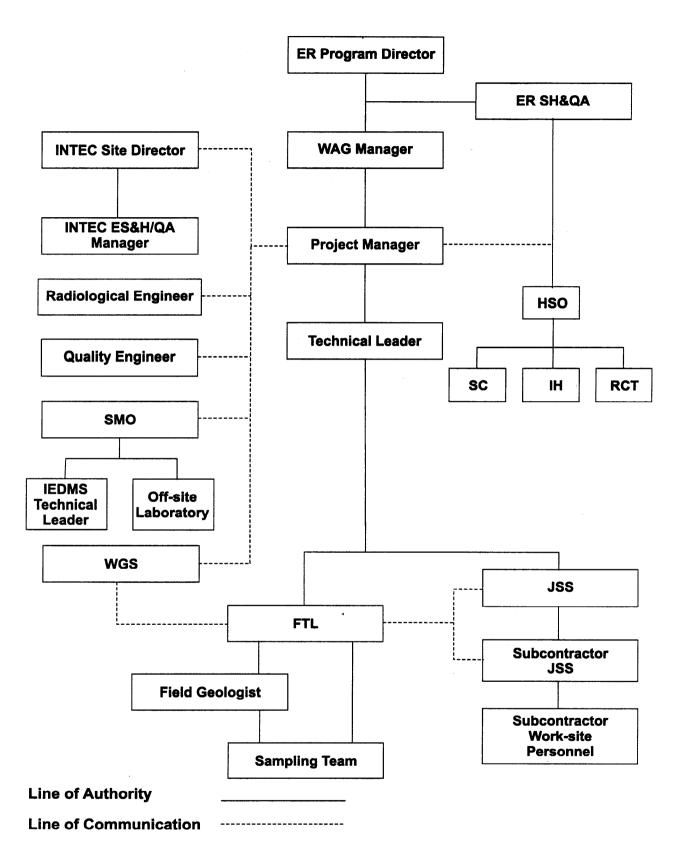


Figure 9-1. The BBWI Organization structure for this project.

- Coordinating the site-specific data collection, review for technical adequacy, and data input to an approved database such as the Environmental Restoration Information System (ERIS)
- Coordinating and interfacing with subcontractors to ensure milestones are met, adequate
 management support is in place, technical scope is planned and executed appropriately, and
 project costs are kept within budget.

9.1.2 Technical Leader

The technical leader provides technical expertise and oversees the preparation, review, and implementation of the LTMP to ensure work is technically correct. The technical leader works with the PM to ensure that

- Site-specific plans required by the ER program, such as work plans, HASPs, SAPs, etc., are prepared.
- Activities and deliverables meet schedule and scope requirements as described in the FFA/CO Attachment A "Action Plan for Implementation of the Federal Facility Agreement and Consent Order" (DOE-ID 1991) and applicable guidance.
- Issues relating to QA, ES&H, and NEPA support for the project are resolved.

The technical leader may function as the field team leader (FTL) at the job site.

9.1.3 Field Team Leader

The FTL represents the ER organization at the job site with delegated responsibility for the safe and successful completion of the project. The FTL works with the PM to manage field sampling or operations, and to execute the work plan. The FTL enforces work-site control, documents activities, and may conduct the daily safety briefings at the start of the shift. Health and safety issues must be brought to the attention of the FTL.

If the FTL leaves the job site, an alternate individual will be appointed to act as the FTL. Persons who act as the FTL on the job site must meet all the FTL training requirements as outlined in the project HASP. The identity of the acting FTL shall be conveyed to work-site personnel, recorded in the FTL logbook, and communicated to the INTEC director, or designee, when appropriate.

The FTL shall comply with the requirements outlined in MCP-3003 by completing the briefings and reviews, and submitting the documentation to the INTEC site director and ER Environment, Safety and Health/Quality Assurance (ES&H/QA) manager. The FTL shall complete the job requirements checklist (JRC) as per STD-101.

The FTL will be responsible for ensuring compliance with waste management requirements and coordinating such activities with the Environmental Compliance Coordinator and/or designee.

9.1.4 Health and Safety Officer

The health and safety officer (HSO) is the person located at the work site who serves as the primary contact for health and safety issues. The HSO shall assist the FTL on all aspects of health and safety (which includes complying with the Enhanced Work Planning process), and is authorized to stop work at the work site if any operation threatens worker or public health and/or safety. The HSO may be

assigned other responsibilities, as stated in other sections of the project HASP, as long as they do not interfere with the primary responsibilities stated here. The HSO is authorized to verify compliance with directed actions, as appropriate. Other ES&H professionals at the work site (safety coordinator [SC], industrial hygienist [IH], RCT, radiological engineer, environmental compliance coordinator, and facility representative[s]) may support the HSO, as necessary.

Any persons assigned as the HSO, or alternate HSO, must be qualified (per OSHA definition) to recognize and evaluate hazards, and will be given the authority to take or direct actions to ensure that workers are protected. While the HSO may also be the IH, SC, or in some cases the FTL at the work site, (depending on the hazards, complexity and size of the activity involved, and with concurrence from the ER ES&H/QA manager) other task-site responsibilities of the HSO must not conflict (philosophically or in terms of significant added volume of work) with the role of the HSO at the work site.

If it is necessary for the HSO to leave the work site, an alternate individual will be appointed by the HSO to fulfill this role. The identity of the acting HSO will be recorded in the FTL logbook, and work-site personnel will be notified.

9.1.5 Industrial Hygienist

The assigned IH is the primary source for information regarding nonradiological hazardous and toxic agents at the task site. The IH will assist the FTL in completing the JRC, and will assess the potential of worker exposure to hazardous agents according to the contractor's Safety and Health Manual (INEEL 1997a), MCPs, and accepted industry IH practices and protocol. By participating in work-site characterization, the IH assesses and recommends appropriate hazard controls for the protection of work-site personnel, operates and maintains airborne sampling and monitoring equipment, and reviews for effectiveness, and recommends and assesses the use of PPE required in the project HASP (recommending changes as appropriate).

Following an evacuation, the IH, in conjunction with other recovery team members, will assist the FTL in determining whether conditions exist for safe work-site reentry as described in the project HASP. Personnel showing health effects (signs and symptoms) resulting from possible exposure to hazardous agents will be referred to an Occupational Medical Program (OMP) physician by the IH, their supervision, or the HSO. The IH may have other duties at the work site, as specified in the project HASP, or in PRDs and/or MCPs. During emergencies involving hazardous materials, airborne sampling and monitoring results will be coordinated with members of the Emergency Response Organization.

9.1.6 Radiological Control Technician

The assigned RCT is the primary source for information and guidance on radiological hazards. The RCT will be present at the job site during any work operations when a radiological hazard to personnel may exist or is specifically anticipated. The RCT will also assist the FTL in completing the JRC. Responsibilities of the RCT include radiological surveying of the work site, equipment, and samples; providing guidance for radioactive decontamination of equipment and personnel; and accompanying affected personnel to the nearest INEEL medical facility for evaluation if significant radiological exposure occurs. The RCT must notify the FTL of any radiological occurrence that must be reported as directed by the *INEEL Radiological Control Procedures* (INEEL 1997b). The RCT may have other duties at the job site as specified in the project HASP, or in PRDs and/or MCPs.

9.1.7 Job-site Supervisor

The job-site supervisor (JSS) serves as the representative for the Facilities, Utilities, and Maintenance (FUM) Department, Site Services Branch, at the task site. The JSS is the supervisor of crafts and other FUM personnel assigned to work at the job site. The JSS is the interface between FUM and ER, and works closely with the FTL at the work site to ensure that the objectives of the project are accomplished in a safe and efficient manner. The JSS and FTL work as a team to accomplish day-to-day operations at the job site; identify and obtain additional resources needed at the job site; and interact with the HSO, IH, SC, RCT, and/or radiological engineer on matters regarding health and safety. The JSS, like the FTL, must be informed about any health and safety issues that arise at the work site and may stop work at the job site if an unsafe condition exists. The JSS also shares the FTL's responsibility for daily prejob briefings.

9.1.8 Subcontractor Job-site Supervisor

A subcontractor JSS serves as the subcontractor safety representative at the work site. The subcontractor JSS may also serve as the subcontractor PM. The subcontractor JSS is the subcontractor field supervisor for subcontractor personnel assigned to work at the job site. The subcontractor JSS and FTL work as a team to accomplish day-to-day operations at the work site; identify and obtain additional resources needed at the work site; and interact with the HSO, IH, SC, RCT, and/or radiological engineer on matters regarding health and safety. The subcontractor JSS, like the FTL, must be informed about any health and safety issues that arise at the work site and may stop work at the job site if an unsafe condition exists. The subcontractor JSS will provide information to the FTL regarding the nature of their work for input at the daily pre-job briefing.

9.1.9 Sampling Team

The sampling team will perform the onsite tasks necessary to collect, package, and ship samples. Tasks may include the physical collection of sample material, completion of chain-of-custody and shipping request forms, and proper packaging of samples in accepted shipping containers (property labels and sealed coolers). The size and makeup of the sampling team will be dependent on the extent of the sampling task. The IH and RCT will support the sampling team when sampling is performed inside the contamination area. The sampling team may be led by the FTL or a designated sample team lead (STL).

9.1.10 Work-site Personnel

All work-site personnel shall understand and comply with the requirements of the project HASP. The FTL or JSS will brief work-site personnel at the start of each shift. During the prejob briefing all daily tasks, associated hazards, engineering and administrative controls, required PPE, work control documents, and emergency conditions and actions will be discussed. Input from the project HSO, IH, RCT, and/or radiological engineer to clarify task health and safety requirements will be provided. All personnel are encouraged to ask questions regarding site tasks and provide suggestions on ways to perform required tasks in a more effective manner based on the lessons learned from previous days' activities.

Once at the job site, personnel are responsible for identifying any potentially unsafe situations or conditions and reporting them to the FTL, JSS, or HSO for corrective action. All work-site personnel are authorized to stop work immediately if they perceive that an unsafe condition poses imminent danger. They must then notify the FTL, JSS, or HSO of the unsafe condition.

9.2 Supporting Personnel

9.2.1 Environmental Restoration Director

The ER Director has ultimate management and operation (M&O) contractor responsibility for the technical quality of all projects, maintaining a safe environment, and the safety and health of all personnel during field activities performed by or for the ER program. The ER Director provides technical coordination and interfaces with DOE-ID. The ER Director ensures that

- Project/program activities are conducted according to all applicable federal, state, local, and company requirements and agreements.
- Program budgets and schedules are approved and monitored to be within budgetary guidelines.
- Personnel, equipment, subcontractors, and services are available.
- Direction is provided for the development of tasks, evaluation of findings, development of conclusions and recommendations, and production of reports.

9.2.2 INTEC Site Area Director

The INTEC Site Area Director has the authority and responsibility to ensure proper ownership review of all activities within the INTEC facility for all work processes and packages. The Site Area Director's authority includes but is not limited to the following:

- Establishing and executing monthly, weekly, and daily operating plans
- Executing the INTEC ES&H/QA program
- Executing the Enhanced Work Planning for INTEC
- Executing the Voluntary Protection Program in the area
- Ensuring environmental compliance within the area
- Executing that portion of the voluntary compliance order that pertains to the area
- Correcting the root cause functions of the accident investigation in the area
- Correcting the root cause functions of the voluntary compliance order for the area.

9.2.3 CFA Site Area Director

Since much of the scope of this project is outside the INTEC fence line, the project activities must be coordinated with CFA management and personnel. The CFA Site Area Director's authority is similar to that described above for the INTEC Site Area Director.

9.2.4 ER SH&QA Manager

The ER Safety, Health, and Quality Assurance (SH&QA) Manager, or designee, is responsible to ensure that ES&H oversight is provided for all ER programs and projects. This position reports to and is accountable to the ER Director. The ER S&H/QA Manager performs line management review, inspections, and oversight in compliance with MCP-3562, "Hazard Identification, Analysis, and Control of Operational Activities." Project or program management will bring all ES&H/QA concerns, questions, comments, and disputes that can not be resolved by the HSO or one of the assigned ES&H professionals to the ER SH&QA manager or the INTEC ES&H/QA manager.

9.2.5 INTEC ES&H/QA Manager

The INTEC ES&H/QA Manager, or designee, is responsible to ensure that ES&H oversight is provided for all ER programs and projects. This position reports to and is accountable to the ER director.

9.2.6 Safety Coordinator

The assigned SC reviews work packages, periodically observes work-site activity, assesses compliance with the contractor's Safety and Health Manual (INEEL 1997a), signs safe work permits, advises the FTL on required safety equipment, answers questions on safety issues and concerns, and recommends solutions to safety issues and concerns that arise at the work site. The SC shall assist the FTL in completing the JRC. The SC may have other duties at the work site as specified in the project HASP, or in PRDs, and/or MCPs. The fire protection engineer's function is included under SC designation, and is the person assigned to review work packages and perform field assessments for fire protection controls.

9.2.7 Radiological Engineer

The radiological engineer is the primary source for information and guidance relative to the evaluation and control of radioactive hazards at the work site. If a radiological hazard exists or occurs at the job site, the radiological engineer makes recommendations to minimize health and safety risks to work-site personnel. Responsibilities of the radiological engineer include: (1) performing radiation exposure estimates and as low as reasonably achievable evaluations, (2) identifying the types(s) of radiological monitoring equipment necessary for the work, (3) advising the FTL and RCT of changes in monitoring or PPE, and (4) advising personnel on work-site evacuation and reentry. The radiological engineer may have to perform evaluations specified in MCP-425, "Survey of Materials for Unrestricted Release and Control of Movement of Contaminated Material" for release of materials with inaccessible surfaces. The radiological engineer may also have other duties to perform as specified in the project HASP or in the *INEEL Radiological Control Procedures* (INEEL 1997b).

9.2.8 Environmental Compliance Coordinator

The assigned environmental compliance coordinator monitors and advises the PM, TL, and FTL performing job-site activities on environmental issues and concerns by ensuring compliance with DOE orders, EPA regulations, and other regulations concerning the effect of work-site activities on the environment.

The environment compliance coordinator provides support surveillance services for hazardous waste storage and transport, and surface-water/storm-water runoff control. The environmental compliance coordinator shall assist the FTL in completing the JRC.

9.2.9 Quality Engineer

The Quality Engineer provides guidance on the work-site quality issues, when requested. The Quality Engineer observes work-site activities and verifies that work-site operations comply with quality requirements pertaining to these activities. The Quality Engineer identifies activities that do not comply or have the potential for not complying with quality requirements and suggests corrective actions.

9.2.10 Sample Management Office (SMO)

The INEEL SMO has the responsibility to obtain laboratory services as required to meet the needs of this project. They will also ensure that data generated from samples meet the needs of the project by validating all analytical laboratory data to resident protocol, and ensuring that data is reported to the project in a timely fashion as required by the FFA/CO.

The laboratory contracted by the SMO will have overall responsibility for laboratory quality, laboratory cost control, laboratory personnel management, and adherence to agreed-upon laboratory schedules. Responsibilities of the laboratory personnel include preparing analytical reports, ensuring chain-of-custody information is complete, and ensuring all QA/QC procedures are implemented in accordance with SMO task order statements of work and master task agreements generated by the SMO.

9.2.11 Integrated Environmental Data Management System Technical Leader

The IEDMS technical leader will interface with the PM during the preparation of the SAP database required by MCP-227. This individual also provides guidance on the appropriate number of field quality control samples required by the QAPjP. The sample numbers used by the project are unique from all others ever assigned by IEDMS. The preparation of the plan database, along with completion of the SMO request services form, initiates the sample tracking and sample waste tracking activities performed by the SMO.

9.2.12 Waste Generator Services Personnel

Waste Generator Services (WGS) personnel provide support to the project in the area of waste segregation, storage, and disposal. For this project a WGS engineer will be assigned to take care of all waste generated from the tasks conducted for this project.

9.2.13 Occasional Workers

All persons who may be on the project work site, but are not part of the field team, are considered occasional workers for the purposes of this project (e.g., surveyor, equipment operator, or other crafts personnel not assigned to the project). A person shall be considered "onsite" when they are present in or beyond the designated support zone. Occasional workers will be deemed occasional site workers per 29 CFR 1910.120/1926.65, and must meet minimum training requirements for such workers as described in the OSHA standard and any additional site-specific training as identified in the project HASP.

All occasional workers, including contractor and subcontractor employees who are not working on the project, or nonessential representatives of DOE and/or state and federal regulatory agencies, may not proceed beyond the support zone without receiving job-specific HASP training, signing the job-specific HASP training acknowledgment form, receiving a full safety briefing, wearing the appropriate PPE, and providing proof of meeting the minimum training requirements specified in the project HASP. A fully trained job-site representative (such as the FTL, JSS, HSO or a designated alternate) will escort occasional workers at all times while on the task site.

9.2.14 Visitors

All visitors with official business at the project task site, including contractor and subcontractor personnel, representatives of DOE, and/or state or federal regulatory agencies, may not proceed beyond the support zone without receiving project-specific HASP training, signing the HASP training acknowledgment form, receiving a full safety briefing, wearing the appropriate PPE, and providing proof of meeting the minimum training requirements as specified in the project HASP. A fully trained job-site representative (such as the FTL, JSS, HSO or a designated alternate) will escort visitors at all times while at the work site.

A casual visitor to the work site is a person who does not have a specific task to perform or other official business to conduct at the work site. Casual visitors are not permitted at the job site(s) for the Group 5 groundwater sampling and monitoring.